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EXAMINER

TANG, KENNETH

ART UNIT PAPER NUMBER

2195

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/896,385

Applicant(s)

BERGER ET AL.

Examiner

Kenneth Tang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the Amendment filed on 12/21/05. Applicant's arguments have been fully considered but they are not found to be persuasive.
2. Claims 1 and 3-29 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 3, 5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoecker et al. (hereinafter Stoecker) (US 5,850,511) in view of Hyndman et al. (hereinafter Hyndman) (US 6,449,643 B1).**
4. As to claim 1, Stoecker teaches a method of administering a processor-based system, said method comprising the steps of:

 implementing at least one compartment for containment (containment tree) at least one process executable on said processor-based system (*col. 5, lines 13-28, etc.*); and

 providing, by said processor-based system, at least one operating system command-line (command line) utility executable to manipulate (by building) said at least one compartment (containment) (*claim 2 and col. 28, lines 50-67, etc.*).

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5. Stoecker fails to explicitly teach wherein said at least one compartment defines whether said at least one process contained therein is allowed access to particular system resources.

However, Hyndman teaches storing access control data pertinent to components including all resources accessible to the building blocks (each building block comprises a database for storing access control data pertinent to said component including all resources accessible to the building block) (*see Abstract*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of at least one compartment defines whether said at least one process contained therein is allowed access to particular system resources in order to increase the security by obtaining the information needed to allow access to the users that have the rights or privileges (*see Abstract*).

6. As to claim 3, Stoecker teaches wherein said at least one process is labeled to identify the compartment in which it is contained (*col. 2, lines 11-18*).

7. As to claim 5, Stoecker teaches defining said at least one compartment in at least one configuration file (specification file) (*col. 5, lines 63-67*).

8. As to claim 7, Stoecker fails to explicitly teach wherein said implementing step comprises providing at least one rule that defines containment of said at least one compartment in at least one configuration file. However, Hyndman teaches a rule-based system for containment (access control) for compartments (building blocks or components) (*col. 1, lines 34-46, col. 2, lines 26-30, see Abstract*).

9. As to claim 8, it is rejected for the same reasons as stated in the rejections of claims 1 and

7.

10. As to claim 9, Hyndman teaches adding a new rule for a particular component, removing an existing rule for a particular component with the use of privileges and the administrator has the listing of all the rules (*col. 2, lines 26-30 and Abstract*).

11. **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoecker et al. (hereinafter Stoecker) (US 5,850,511) in view of Hyndman et al. (hereinafter Hyndman) (US 6,449,643 B1), and further in view of Thalhammer-Reyero (US 5,930,154).**

12. As to claim 4, Stoecker fails to explicitly teach adding a new compartment, renaming an existing compartment, removing an existing compartment, resizing an existing compartment, adding a process to a compartment, and removing a process from a compartment. However, Thalhammer-Reyero teaches adding a new compartment, renaming an existing compartment, removing an existing compartment, resizing an existing compartment, adding a process to a compartment, and removing a process from a compartment (*col. 5, lines 39-47, col. 13, lines 10-15, col. 19, lines 60-67 through col. 20, lines 1-4, col. 27, lines 5-13, col. 30, lines 19-20, and col. 40, lines 3-13*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of adding a new compartment, renaming an existing

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compartment, removing an existing compartment, resizing an existing compartment, adding a process to a compartment, and removing a process from a compartment to the existing system of Stoecker in order to increase the control by allowing adjustments of compartments.

13. **Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoecker et al. (hereinafter Stoecker) (US 5,850,511) in view of Hyndman et al. (hereinafter Hyndman) (US 6,449,643 B1), and further in view of Tate et al. (hereinafter Tate) (US 6,493,751 B1).**

14. As to claim 6, Stoecker teaches command-line utilities to manipulate compartments but fails to explicitly teach manipulating without requiring a user to edit a configuration file. However, Tate teaches manipulating without requiring the actual inputting and on-screen editing of the configuration files by the user (*col. 4, lines 6-11*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of manipulating without requiring a user to edit a configuration file to the existing containment system because this makes the process simpler for the user (*col. 3, lines 45-58*).

15. **Claims 10, 12, 19, and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoecker et al. (hereinafter Stoecker) (US 5,850,511) in view of Tate et al. (hereinafter Tate) (US 6,493,751 B1).**

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16. As to claim 10, Stoecker teaches a system comprising:

an operating system stored to computer-readable medium (*memory in computer system, col. 7, lines 29-39, etc.*), said operating system implementing at least one compartment (containment tree) to which at least one process executable on said system can be associated (*col. 5, lines 13-28, etc.*);

at least one configuration file stored to computer-readable medium (*memory in computer system, col. 7, lines 29-39, etc.*), said at least one configuration file defining said at least one compartment (specification file) (*col. 5, lines 63-67, etc.*); and

Stoecker teaches command-line utilities to manage and manipulate compartments but fails to explicitly teach manipulating without requiring a user to edit a configuration file. However, Tate teaches manipulating without requiring the actual inputting and on-screen editing of the configuration files by the user (*col. 4, lines 6-11*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of manipulating without requiring a user to edit a configuration file to the existing containment system because this makes the process simpler for the user (*col. 3, lines 45-58*).

17. As to claim 12, Stoecker teaches wherein said performing management of said at least one compartment comprises manipulating said at least one compartment (*col. 1, line 39*).

18. As to claim 19, it is rejected for the same reasons as stated in the rejection of claim 10. In addition, Stoecker teaches an operating system command-line utility for the management/manipulation (*claim 2 and col. 28, lines 50-67, etc.*).

19. As to claim 26-27, they are rejected for the same reasons as stated in the rejections of claims 10 and 12.

20. **Claims 11, 14 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoecker et al. (hereinafter Stoecker) (US 5,850,511) in view of Tate et al. (hereinafter Tate) (US 6,493,751 B1), and further in view of Fletcher et al. (hereinafter Fletcher) (US 6,009,274).**

21. As to claim 11, Stoecker and Tate fail to explicitly teach wherein said means for performing management of said at least one compartment further enables management actions initiated via said means for performing management to be performed dynamically, without requiring that the system be re-booted in order for said management actions to be effective within said system. However, Fletcher teaches an agent that manages components (compartments) dynamically, without having to actually reboot the system (*col. 9, lines 3-16*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of wherein said means for performing management of said at least one compartment further enables management actions initiated via said means for performing management to be performed dynamically, without requiring that the system be re-booted in order for said management actions to be effective within said system to the existing system of Stoecker and Tate in order to increase the convenience and practicality (*col. 9, lines 3-16*).

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22. As to claim 14, it is rejected for the same reasons as stated in the rejection of claim 11.

23. As to claim 29, it is rejected for the same reasons as stated in the rejection of claim 14.

24. **Claims 13, 15 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoecker et al. (hereinafter Stoecker) (US 5,850,511) in view of Tate et al. (hereinafter Tate) (US 6,493,751 B1), and further in view of Thalhammer-Reyero (US 5,930,154).**

25. As to claim 13, Stoecker and Tate fail to explicitly teach adding a new compartment, renaming an existing compartment, removing an existing compartment, resizing an existing compartment, adding a process to a compartment, and removing a process from a compartment. However, Thalhammer-Reyero teaches adding a new compartment, renaming an existing compartment, removing an existing compartment, resizing an existing compartment, adding a process to a compartment, and removing a process from a compartment (*col. 5, lines 39-47, col. 13, lines 10-15, col. 19, lines 60-67 through col. 20, lines 1-4, col. 27, lines 5-13, col. 30, lines 19-20, and col. 40, lines 3-13*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of adding a new compartment, renaming an existing compartment, removing an existing compartment, resizing an existing compartment, adding a process to a compartment, and removing a process from a compartment to the existing system of Stoecker and Tate in order to increase the control by allowing adjustments of compartments.

26. As to claim 15, Stoecker and Tate fails to explicitly teach wherein said performing management of said at least one compartment comprises switching from a first compartment to a second compartment. However, Thalhammer-Reyero teaches switching compartments using a graphical user interface (*col. 2, lines 1-16, col. 5, lines 39-47, col. 13, lines 10-15, col. 19, lines 60-67 through col. 20, lines 1-4, col. 27, lines 5-13, col. 30, lines 19-20, and col. 40, lines 3-13*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of a graphical user interface that provides for switching from one compartment to another compartment to the existing compartment/containment system of Stoecker and Tate because this would increase the control by allowing to retrieve other compartments (*col. 2, lines 1-16*).

27. As to claim 28, it is rejected for the same reasons as stated in the rejection of claim 13.

28. **Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoecker et al. (hereinafter Stoecker) (US 5,850,511) in view of Tate et al. (hereinafter Tate) (US 6,493,751 B1), and further in view of Hyndman et al. (hereinafter Hyndman) (US 6,449,643 B1).**

29. As to claim 16, Stoecker and Tate fails to explicitly teach at least one configuration file including at least one rule defining containment of said at least one compartment. However,

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Hyndman teaches a rule-based system for containment (access control) for compartments (building blocks or components) (*col. 1, lines 34-46, col. 2, lines 26-30, see Abstract*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of providing at least one rule that defines containment of said at least one compartment in at least one configuration file to the existing system of Stoecker and Tate in order to increase the security by providing access control and privileges (*col. 2, lines 26-30 and Abstract*).

30. As to claim 17, Hyndman teaches wherein said performing management of said at least one compartment comprises manipulating said at least one rule (*col. 1, lines 56-60 and col. 2, lines 26-37 and Abstract*).

31. As to claim 18, Hyndman teaches adding a new rule for a particular component, removing an existing rule for a particular component with the use of privileges and the administrator has the listing of all the rules (*col. 2, lines 26-30 and Abstract*).

32. **Claims 20, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable by Hyndman et al. (hereinafter Hyndman) (US 6,449,643 B1) in view of Stoecker et al. (hereinafter Stoecker) (US 5,850,511).**

33. As to claim 20, Hyndman teaches a computer-readable medium including instructions executable by a processor, said computer-readable medium comprising:

library (access control library) of software functions for managing at least one compartment (building block or component) implemented by an operating system, wherein at least one process can be associated with said at least one compartment and said at least one compartment defines accessibility of resources for said at least one process associated therewith (*col. 1, lines 34-46 and see Abstract*); and

said library of software functions includes at least one command-line utility executable to manipulate (editing) said at least one compartment (*see Abstract*).

34. As stated previously, Hyndman teaches manipulating the compartment with a graphical user interface (GUI). Hyndman fails to explicitly teach having an operating system command-line utility. However, Stoecker teaches having command line utility for a containment tree (*col. 5, lines 51-67, col. 7, lines 29-48, etc.*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of a command line utility for a containment tree to the existing containment/compartment system of Hyndman because it would increase the control of the system by providing instructions (*col. 5, lines 51-67, col. 7, lines 29-48, etc.*).

35. As to claim 22, Stoecker teaches defining said at least one compartment in at least one configuration file (specification file) (*col. 5, lines 63-67*).

36. As to claim 24, it is rejected for the same reasons as stated in the rejection of claim 20. In addition, Hyndman teaches implementing and manipulating at least one rule (*col. 2, lines 26-29*).

37. **Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyndman et al. (hereinafter Hyndman) (US 6,449,643 B1) in view of Stoecker et al. (hereinafter Stoecker) (US 5,850,511), and further in view of Thalhammer-Reyero (US 5,930,154).**

38. As to claim 21, Hyndman fails to explicitly teach adding a new compartment, renaming an existing compartment, removing an existing compartment, resizing an existing compartment, adding a process to a compartment, and removing a process from a compartment. However, Thalhammer-Reyero teaches adding a new compartment, renaming an existing compartment, removing an existing compartment, resizing an existing compartment, adding a process to a compartment, and removing a process from a compartment (*col. 5, lines 39-47, col. 13, lines 10-15, col. 19, lines 60-67 through col. 20, lines 1-4, col. 27, lines 5-13, col. 30, lines 19-20, and col. 40, lines 3-13*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of adding a new compartment, renaming an existing compartment, removing an existing compartment, resizing an existing compartment, adding a process to a compartment, and removing a process from a compartment to the existing system in order to increase the control by allowing adjustments of compartments.

39. **Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyndman et al. (hereinafter Hyndman) (US 6,449,643 B1) in view of Stoecker et al. (hereinafter**

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Stoecker) (US 5,850,511), and further in view of Tate et al. (hereinafter Tate) (US 6,493,751 B1).

40. As to claim 23, it is rejected for the same reasons as stated in the rejection of claim 10. However, Hyndman and Stoecker fails to explicitly teach performing manipulation of said at least one compartment without requiring that a user edit said at least one configuration file in which said at least one component is defined. However, Tate teaches manipulating without requiring the actual inputting and on-screen editing of the configuration files by the user (*col. 4, lines 6-11*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of manipulating without requiring a user to edit a configuration file to the existing containment system because this makes the process simpler for the user (*col. 3, lines 45-58*).

41. **Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoecker et al. (hereinafter Stoecker) (US 5,850,511) in view of Hyndman et al. (hereinafter Hyndman) (US 6,449,643 B1), and further in view of Kuhn (US 6,023,765).**

42. As to claim 25, Stoecker and Hyndman fails to explicitly teach wherein said implementing a least one compartment comprises utilizing a kernel for enforcing said at least one compartment. However, Kuhn teaches a kernel permitting access to one or more compartments (*col. 6, lines 50-52, col. 8, lines 20-25*). It would have been obvious to one of ordinary skill in

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the art at the time the invention was made to combine Kuhn with Stoecker and Hyndman because this would provide control to the compartments (*col. 6, lines 50-52, col. 8, lines 20-25*).

Response to Arguments

43. During patent examination, the pending claims must be “given their broadest reasonable interpretation consistent with the specification.” *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). Both a containment tree (data structure) and data building block satisfy the broadest reasonable interpretation of a compartment.

44. *Applicant argues on pages 10, 13, and 16 of the Remarks that the compartment is not implemented by an operating system.*

In response, the Examiner respectfully disagrees. Stoecker teaches implementing at least one compartment for containment (containment tree) at least one process executable on said processor-based system (*col. 5, lines 13-28, etc.*). The computer processor-based system has an operating system. All computer systems have an operating system in order for the processor to perform processing.

45. *Applicant argues on pages 11 and 14 of the Remarks that the command-line utility that manipulates the compartments.*

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Stoecker teaches altering compartments (containments) by user input (*col. 8, lines 1-6*). The user has command line options that affect operating system execution (*col. 7, lines 29-30*). The computer processor-based system has an operating system. All computer systems have an operating system in order for the processor to perform processing.

Conclusion

46. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- **US 6,351,850 B1** teaches modifying partitions using a DOS or Windows computer operating system, such that modifying could consist of resizing an existing compartment, adding a new process to a compartment, removing a process of a compartment, etc. (*see Abstract*).
- **US 6,470,434 B1** teaches adding, deleting or modifying partitions using a DOS computer operating system (*col. 7, lines 12-24, etc.*).

47. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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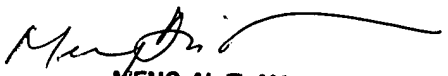
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
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